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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/936,621 | 01/10/2002 | Ugo Siepel | 294-109 PCT/US | 7146 |

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| EXAMINER | |
|---|---|
| TRAN LIEN, THUY | |
| **ART UNIT** | **PAPER NUMBER** |
| 1761 | |

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/936,621 | SIEPEL ET AL. | |
| | Examiner | Art Unit | |
| | Lien T. Tran | 1761 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3,9-11 and 13-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 9-11 and 13-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 16-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In the response filed 1/3/06, applicant submits new claims 16 and 17 which recite a composition consists essentially of a non-cereal amylopectin and a heat expanded foodstuff consisting essentially of a non-cereal amylopectin starch. The new claims are not supported by the original disclosure because the specification does not disclose composition consisting essentially of the starch. It is not clear what examples in the specification applicant relies on for such language. Example 1 discloses composition containing starch mixture, powdered sugar, salt, glutamate and water. Example 5 discloses a composition containing starch, potato flakes, sodium bicarbonate, citric acid, acid sodium pyrophosphate, oil, lecithin, and water.

Claims 1-3. 9-11 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Hulle et al in view of Jeffcoat et al.

Van Hulle et al disclose methods for preparing puffed snack products. The products are formed from gelatinized doughs whose total amylopectin starch content ranges between about 30-95%. The method comprises the steps of mixing amylopectin starch together with other ingredients to form a dough, cooking the dough in an extruder to gelatinize the dough, shaping the dough into pieces, drying the pieces and puffing the pieces. (see col. 5 lines 1-13 and col. 7)

Van Hulle et al do not disclose the amylopectin starch is non-cereal amylopectin starch obtained from potato, heating the composition to a temperature above the glass transition temperature to expand the composition comprising the amylopectin starch and cooling to below the glass transition temperature.

Jeffcoat et al disclose a stabilized, crosslinked waxy potato starch.

It would have been obvious to one skilled in the art to use other known source of high amylopectin-containing starch to make the amylopectin dough disclosed by Van Hulle et al. It would have been obvious to one skilled in the art to use waxy potato starch such as the one disclosed by Jeffcoat et al when one wants the flavor of potato and still meeting the amylopectin content requirement. As to the heating to above glass transition temperature, the dough in the Van Hulle et al process is heated to gelatinize the dough; thus, it is obvious the dough is heated to above the glass transition temperature. As to the expanding, the dough is heated just as claimed; thus, it is obvious the composition is expanded. The dough is dried at lower temperature; thus, it is obvious the dough is cooled to below the glass transition temperature. The dough pieces are puffed which will cause more expansion and the product is a snack that has a glazed, sugar coating. Since the dough is heated and expanded, the product is a heat expanded foodstuff. With respect to claims 16-17, the claims do not define over the teaching of Van Hulle et al and Jeffcoat et al. In absence of a clear indication in the specification or claims of what the basic and novel characteristics actually are; consisting essentially of is construed as equivalent to " comprising". As to the expansion percent, the specification discloses the expansion is due to the use of non-

cereal amylopectin starch; thus, it is obvious the prior art product will have such expanding characteristic when non-cereal starch disclosed by Jeffcoat is used in placed of the cereal starch disclosed by Van Hulle et al.

In the response filed 1/3/06, applicant argues that it is apparent that a starch " cooked in an extruder under pressure would not expand". The examiner is not aware of such apparent fact. The prevention of the expansion would depend on the type of equipment used. Furthermore, if such fact is common knowledge, evidence to support it would be readily available; however, applicant has not submitted any evidence to show that expansion cannot take place in the extruder under pressure. In any event, Van Hulle do not disclose heating by extrusion only. On column 7 lines 7-10, they disclose " different methods of cooking include heating at atmospheric pressure in an agitated kettle". Applicant further argues the process of gelatinization disclosed in van Hulle et al is not equivalent to nor suggestive of heating starch to above the glass transition temperature. The claims do not recite any numerical range for the glass transition temperature. There is not a single glass transition temperature; there are midpoint, peak point determination and the temperature also varies with the moisture content of the product. Applicant states in the previous response that the glass transition temperature for starch is in the range of 150-300 degree C. Van Hulle et al disclose gelatinizing the starch at 121-176 degree C which is within the glass transition temperature cited by applicant. Thus, the two heating steps are equivalent.

Applicant further argues the starch disclosed by Jeffcoat et al has higher viscosity than waxy maize starch which will lead to reduced expansion. Applicant

submits a declaration to show this point. The declaration gives an equation for bubble growth rate; however, the declaration does not make any correlation between the equation and the viscosity and expansion rate. It is not known how the equation is used to show that higher viscosity lead to reduce expansion. Furthermore, the statement made in the declaration is contradicting to what is claimed and argued by applicant. The declaration states that the starch disclosed by Jeffcoat et al has reduced expansion; however, the starch is the same type of starch claimed and disclosed. The specification discloses the non-cereal amylopectin starch is derived from potato and it may be crosslinked and stabilized. The declaration shows that cross-linked amylopectin potato starch give high expansion index than native amylopectin potato starch and waxy maize starch. The showing is not commensurate in scope with the claims because the claims only recite non-cereal amylopectin starch. Furthermore, Jeffcoat et al disclose cross-linked amylopectin starch. Thus, it is not understood how applicant argues that the starch reduces expansion but then show that such starch gives higher expansion index.

Applicant also refers to the results shown in Table 2 of the specification. The results shown is not conclusive to enable one to draw a definite conclusion. For example, it is not known if examples 6, 7 contain the same ingredients as example 5. The presence of sodium bicarbonate and acid sodium pyrophosphate will also affect expansion. Samples 7 and 11 shows that something other than the starch affects the expansion. Also, the showing contradicts applicant's argument. Applicant argues the starch disclosed by Jeffcoat et al will reduce expansion. However, sample 10 shows

the highest expansion and the starch is a crosslinked, stabilized amylopectin starch which is the starch disclosed by Jeffcoat et al.

Applicant's arguments filed 1/3/06 have been fully considered but they are not persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Tuesday, Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cano Milton can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 11, 2006

LIEN TRAN
PRIMARY EXAMINER
Group 1702